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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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CARLSON, GASKEY & OLDS, P.C.
400 WEST MAPLE ROAD
SUITE 350
BIRMINGHAM, MI 48009

EXAMINER

BURCH, MELODY M

ART UNIT PAPER NUMBER

3683

DATE MAILED: 07/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/892,163

Applicant(s)

CATANIA, MICHAEL VITO

Examiner

Melody M. Burch

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4,6 and 9-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16 is/are allowed.
- 6) ☒ Claim(s) 4,6,9-15 and 17-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "14" has been used to designate both a brake shoe in figure 2 and a brake shoe assembly in figures 3 and 4. A similar problem holds true for element number 16. Additionally, figure 4 shows the clip 50 being attached to portion 28 of the brake shoe although in line 2 of paragraph 25 it is suggested that figure 4 shows the clip being attached at a position other than the backing plate 28. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

Specification

3. The disclosure is objected to because of the following informalities:
 - Element numbers "14" and "16" are used to designate both brake shoes as disclosed in paragraph [19] and brake shoe assemblies as disclosed in paragraph [17].

Appropriate correction is required.

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification lacks proper antecedent basis for the term "connector portion". Examiner recommends providing proper antecedent basis for the term similar to the way in which proper antecedent basis for the term "base portion" was provided in the specification.

Claim Objections

5. Claims 12-14 are objected to because of the following informalities:

Re: claim 12. Applicant is recommended to reword the phrase recited in claim 11 to read --An assembly according to claim 11 wherein said first retainer clip engages said webbed flanges of said first backing plate and said second retainer clip engages said webbed flanges of said second backing plate-- to more accurately claim what is shown.

Re: claims 13 and 14. The word "include" should be changed to --includes--;

Re: claim 13. The phrase "said body" in line 2 from the bottom should be changed to --said bodies-- since the previous recitation refers to "each" of the anchor pins which include a cylindrical body (suggesting the presence of more than one body). Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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7. Claims 6, 9-15, 17-21 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re: claim 6. The phrase "said base plate" in line 8 lacks proper antecedent basis in the claim.

Re: claim 9. The phrase "second pair of pin ends" in lines 2-3 from the bottom is indefinite. It is unclear to the Examiner whether the second pair of pin ends recited in lines 2-3 from the bottom of claim 9 are intended to be the same or different from those earlier recited. Examiner has interpreted the recitation to refer back to the earlier claimed second pair of pin ends. If the interpretation is correct Examiner recommends the use of such language as --said second pair of pin ends--.

Re: claim 13. The phrase "each of said anchor pins include[s] a cylindrical body and a pair of pin ends" in lines 1-2 is indefinite. It is unclear to the Examiner whether the cylindrical bodies and pairs of pin ends claimed in claim 13 are intended to be the same or different from the first and second cylindrical bodies and pairs of pin ends claimed in claim 9.

Re: claim 14. The phrase "a base plate with a pair of hooked legs" in lines 1-2 is indefinite. It is unclear to the Examiner whether the base plate is intended to be the same or different from the base portion claimed in claim 9 and whether the pair of hooked legs is intended to be the same or different from the pair of legs claimed in claim 9. Examiner recommends such language, for example, as --wherein said pair of

legs include hooked legs-- to provide a more detailed description of the previously claimed legs.

Re: claim 17. The phrase "said brake" in line 5 lacks proper antecedent basis in the claim.

The remaining claims are indefinite due to their dependency from one of claims 9 and 17.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 4, 9-13, 15, and 17-21 rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 4679667 to Zawodni in view of US Patent 4503953 to Majewski.

Re: claims 4, 17, and 18. Zawodni shows in figures 1-3 a brake shoe assembly comprising: a brake spider 12, a mounting member 28,44 supported on the brake spider and including an arcuate surface for supporting a brake lining 24, an anchor pin 18 pivotally mounting one end of the mounting member to the brake spider, the anchor pin including a cylindrical body 18 with a pair of pin ends 52,50 extending in opposite directions from the body to define a pivot axis, and a retaining means 40,40 attached solely to the mounting member and cooperating with both of the pin ends (portion 52 of

the pin ends) as shown to maintain proper shoe orientation, wherein the retainer clip, the anchor pin, and the mounting member are all rotated about the pivot axis during brake actuation, but does not include the limitation of the retaining means being in the form of a single retainer clip including a base portion with a connector portion and a pair of legs extending outwardly from opposite ends of the base portion to support the anchor pin with the pin ends being supported by the legs.

Majewski shows in figures 3-6 the use of a brake shoe assembly having a single retainer clip 46 including a base portion shown in the area of element number 56 with a connector portion shown in the area of element numbers 48,50 and a pair of legs 42,52 and 44,54 extending outwardly from opposite ends of the base portion to support a pin 20 of a brake assembly with the pin ends being supported by the legs as shown in figure 3.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the retaining means of Zawodni to have included a single retainer clip, as taught by Majeswki, in order to provide a means of securely attaching a portion of a brake shoe to a pin of a brake assembly to improve overall assembly reliability.

Re: claims 9, 10, 20, and 21. Zawodni shows in figure 1 a cam brake assembly comprising: a first brake shoe 16 (left) including a first backing plate 28 (left) for supporting a first brake lining 24 (left); a second brake shoe 16 (right) including a second backing plate 28 (right) for supporting a second brake lining 24 (right) wherein the second brake lining faces an opposite direction from the first brake lining; a brake

spider 12 having a first mounting portion for attachment to the first brake shoe and a second mounting portion for attachment to the second brake shoe; a first anchor pin 18 (left) pivotally attaching one end of the first brake shoe to the first mounting portion to define a first pivot axis, the first anchor pin including a first cylindrical body with a first pair of pin ends extending in opposite directions from the first cylindrical body as shown in figure 3; a second anchor pin 18 (right) pivotally attaching one end of the second brake shoe to the second mounting portion to define a second pivot axis, the second anchor pin including a second cylindrical body with a second pair of pin ends extending in opposite directions from the second cylindrical body; an actuator 30 for pivoting opposite ends of the first and second brake shoes about the first and second pivot axes, respectively, during a brake actuation; a first retaining means or clips 40,40 (left) attached to the first brake shoe for cooperation with the first anchor pin to maintain proper contact and orientation between the first anchor pin and the first brake shoe; and a second retaining means or clips 40,40 (right) attached to the second brake shoe for cooperation with the second anchor pin to maintain proper contact and orientation between the second anchor pin and the second brake shoe, but does not include the limitation of the retaining means being in the form of a first retainer clip (singular) and a second retainer clip (singular) each having a pair of legs interconnected by a first base portion with the pair of legs cooperating with the pin ends.

Majewski shows in figures 3-6 the use of a brake shoe assembly having a retainer clip (singular) 46 including a base portion shown in the area of element number 56 with a connector portion shown in the area of element numbers 48,50 and a pair of

legs 42,52 and 44,54 extending outwardly from opposite ends of the base portion to support a pin 20 of a brake assembly with the pin ends being supported by the legs as shown in figure 3.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the first and second retaining means of Zawodni to have each included a retainer clip (singular), as taught by Majeswki, in order to provide a means of securely attaching a portion of a brake shoe to a pin of a brake assembly to improve overall assembly reliability.

Re: claims 11, 12, and 15. Zawodni, as modified, teaches the limitation wherein each of the first and second backing plates includes a pair of spaced apart transversely extending webbed flanges 44 defining an engagement surface as shown in the area of element numbers 46, the engagement surface of the first backing plate contacting the first anchor pin and the engagement surface of the second backing plate contacting the second anchor pin. See figure 1 of Zawodni.

Re: claim 13. Zawodni, as modified, teaches the limitation of portion 52 of the pin ends has a smaller diameter than the body 18 and wherein an exterior surface of the body contacts the engagement surface of the webbed flanges indirectly via the contact with the pin ends. See figure 3 of Zawodni.

Re: claim 19. Zawodni, as modified, teaches the limitation wherein the cylindrical body 18 has a greater diameter than portion 52 of the pin ends. See figure 3 of Zawodni.

Allowable Subject Matter

10. Claim 6 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.
11. Claim 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
12. Claim 16 is allowed. Zawodni, as modified, fails to show or suggest the limitation of the resilient tab with the at least one grip.

Response to Arguments

13. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Response to Amendment

14. Applicant's request for reconsideration of the finality of the rejection is persuasive and, therefore, the finality of the action of paper number 5 is withdrawn. For examining purposes, the current Office Action is based on the entry of the amendment of paper no. 8 filed 2/3/03 which is based on the entry of the amendment of paper no. 6 filed 1/13/03. Examiner agrees that element 20 of Majewski is not an anchor pin that pivotally mounts an end of the mounting member.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 703-306-4618. The examiner can normally be reached on Monday-Friday (7:30 AM-4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

mmb
mmb
July 14, 2003

Melody M. Burch
7/14/03